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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/711,278 | 09/07/2004 | Charles H. Honeyman | H-307DIV | 5277 |
| 26245 | 7590 | 03/07/2006 | EXAMINER | |
| DAVID J COLE E INK CORPORATION 733 CONCORD AVE CAMBRIDGE, MA 02138-1002 | | | TSOY, ELENA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1762 | |

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/711,278

Applicant(s)

HONEYMAN ET AL.

Examiner

Elena Tsoy

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 27 February 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on 27 February 2006. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1,8-20,35, and 37-42.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

Advisory Action

1. The amendment filed on February 27, 2006 under 37 CFR 1.116 in reply to the final rejection has been entered and considered but is not deemed to place the application in condition for allowance for the reasons of record set forth in the Final Office Action mailed on 10/31/2005. Claim 36 has been cancelled. Claims 1-20, and 35, 37-42 are pending in the application. Claims 2-7 are withdrawn from consideration as directed to a non-elected invention.

Response to Arguments

2. Applicants' arguments filed February 27, 2006 have been fully considered but they are not persuasive.

(A) Applicants argue that Herman describes a process for the coating of titania pigment particles, in which there is added to a water slurry of titania a polyanionic dispersing agent, the slurry is diluted until it contains 15 to 30% of titania, and then there is added to the diluted slurry an anchoring agent comprising an organic vinyl monomer containing polar groups which are adsorbed on to the surface of said [titania] particles (see Herman claim 1, emphasis added). The italicized wording clearly shows that in the Herman process the "anchoring agent" is simply adsorbed on to the titania surface by ionic interactions and is not bonded to the surface via a covalent bond, as required by present claims 35 and 39-40. Hence, Herman cannot anticipate any of the present claims.

The Examiner respectfully disagrees with this argument. Herman does teach covalent bonding because Herman *expressly* teaches "**bonding**" (See column 3, line 29) of the polymer to the surface of the pigment **via an anchoring agent** (not polyanionic dispersing agent) (See

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column 3, lines 30-33). It is well known in the art that the titania particle has OH functional groups on its surface so that **bonding** COOH anchoring polar group (See column 3, line 42) to the titania surface would mean only **forming a bond** between COOH anchoring polar group and OH surface group, i.e. forming **covalent ester** bond, or **bonding** OH anchoring polar group (See column 3, line 45) to the titania surface would mean only **forming a bond** between OH anchoring polar group and OH surface group, i.e. forming **covalent ether** bond.

(B) Applicants argue that there is no logical way to combine Katoh and Sakai. Sakai is explicitly restricted to silica particles, which are shown to have the right physical properties for use as spacers in liquid crystal displays. There is no logical reason why a skilled person, seeking to improve the Katoh coated titania particles, would assume that Sakai is relevant. Sakai is concerned solely with controlling the surface properties of silica particles to render them more suitable for use as spacers in liquid crystal displays, whereas Katoh is concerned with coating titania particles to adjust their relative affinities for two immiscible suspending fluids (typically water and hydrocarbon) in an electrophoretic display. (The reference to liquid crystals in Katoh is solely by way of acknowledging prior art in the area of electro-optic displays; the Katoh displays are electrophoretic displays, not liquid crystal ones, and there is no suggestion in Katoh that liquid crystals can usefully be used as either of his suspending fluids.) Given the major differences in both the materials being coated and the liquid in which the coated particle is to be used, there is no logical reason why the skilled person would assume that the type of coating described in Sakai would be useful in the Katoh displays.

The Examiner respectfully disagrees with this argument. First of all, in contrast to Applicants argument, Katoh is concerned with a marking ink composition comprising a dye and

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a pigment and a **display medium** comprising marking ink composition (See column 1, lines 6-14). A liquid crystal, electrochromic device, electrophoretic migration device, and magnetic migration device are conventionally known as elements for use in the display medium (See column 1, lines 16-25).

Secondly, in contrast to Applicants argument, Katoh is concerned with coating not only of titania particles (See column 17, lines 4-5) but also titanium oxide coated with a silicon oxide (See column 17, line 6).

Therefore, there is logical reason why the skilled person would assume that the type of coating described in Sakai would be useful in the Katoh displays.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is 571-272-1429. The examiner can normally be reached on Monday-Thursday, 9:00AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-142323. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elena Tsoy
Primary Examiner
Art Unit 1762

ELENA TSOY
PRIMARY EXAMINER
ETsoy

March 2, 2006